DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	WIGHT POND	Lake Area (ha):	5.26
Town:	DUBLIN	Maximum depth (m):	5.1
County:	Cheshire	Mean depth (m):	2.3
River Basin:	Connecticut	Volume (m^3):	118500
Latitude:	42°55'00" N	Relative depth:	2.0
Longitude:	72°07'45" W	Shore configuration:	1.23
Elevation (ft):	1270	Areal water load (m/yr):	6.00
Shore length (m):	1000	Flushing rate (yr^{-1}):	2.70
Watershed area (ha):	54.9	P retention coeff.:	0.63
% watershed ponded:	0.0	Lake type:	natural

BIOLOGICAL:		15 February 1991	5 July 1990
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 99%	OSCILLATORIA 35%
	#2		DINOBRYON 25%
	#3		SYNURA 20%
PHYTOPLANKTON ABUNDANCE (cells/mL)			250.0
CHLOROPHYLL-A (µg/L)			1.82
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 58%	KERATELLA 35%
	#2	POLYARTHRA 10%	NAUPLIUS LARVA 24%
	#3	NAUPLIUS LARVA 10%	CYCLOPOID COPEPOD 17%
ROTIFERS/LITER		97	69
MICROCRUSTACEA/LITER		22	127
ZOOPLANKTON ABUNDANCE (#/L)		119	196
VASCULAR PLANT ABUNDANCE			Scat/Common
SECCHI DISK TRANSPARENCY (m)			5.1
BOTTOM DISSOLVED OXYGEN (mg/L)		10.5	7.1
BACTERIA (fecal col., #/100 ml)	#1		< 1
	#2		< 1
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m^3) : None
Anoxic volume (m^3) : None

CHEMICAL:

Lake: WIGHT POND
Town: DUBLIN

	15 February 1991		5 July 1990		
DEPTH (m)	1.5	3.0	1.5		3.5
pH (units)	5.4	5.4	5.8		5.7
A.N.C. (Alkalinity)	0.4	0.3	0.6		0.5
NITRATE NITROGEN	< 0.05	< 0.05	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.26	0.17	0.17		
TOTAL PHOSPHORUS	0.002	0.002	0.011		0.010
CONDUCTIVITY (μmhos/cm)	21.9	22.4	17.6		17.7
APPARENT COLOR (cpu)	16	16	< 5		6
MAGNESIUM			0.41		
CALCIUM			< 1.0		
SODIUM			< 1.0		
POTASSIUM			< 0.40		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	6	6	4		4
TN : TP	130	85	15		
CALCITE SATURATION INDEX					

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1990

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	1	2	0	3	Oligo.

COMMENTS:

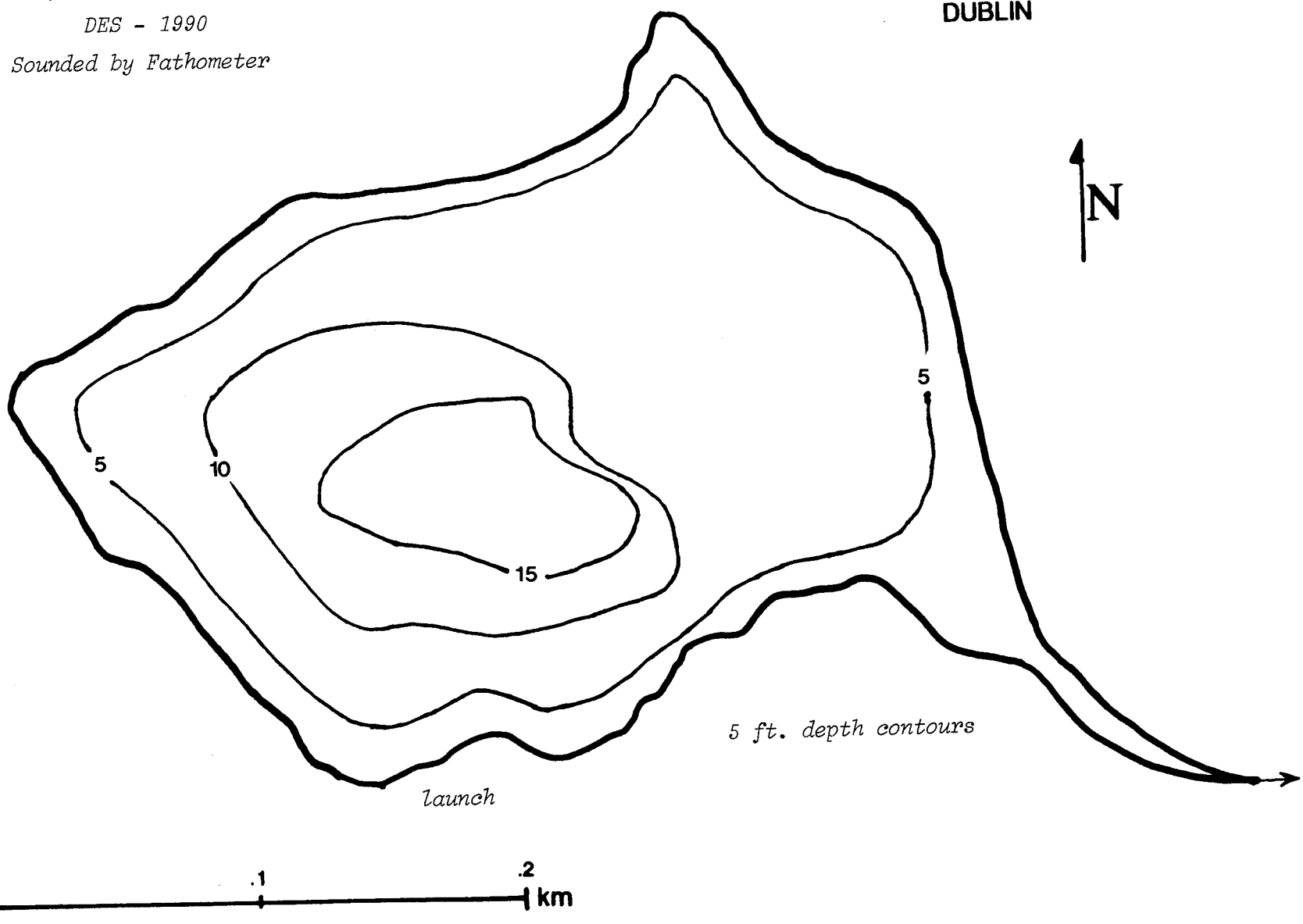
1. Also known as Wright Pond.
2. Water level was 1 to 1.5 feet below spring levels (during pollen season).
3. A juvenile camp (Camp Rockne) was located along the southern shore.
4. The dominant genera of wholewater phytoplankton were Dinobryon (as single cells -- 30%) and Mallomonas (15%).

WIGHT POND

Rough Bathymetric Chart

DES - 1990

Sounded by Fathometer



FIELD DATA SHEET

LAKE: WIGHT POND
DATE: 07/05/90

TOWN: DUBLIN
WEATHER: MOSTLY SUNNY; BREEZY & WARM

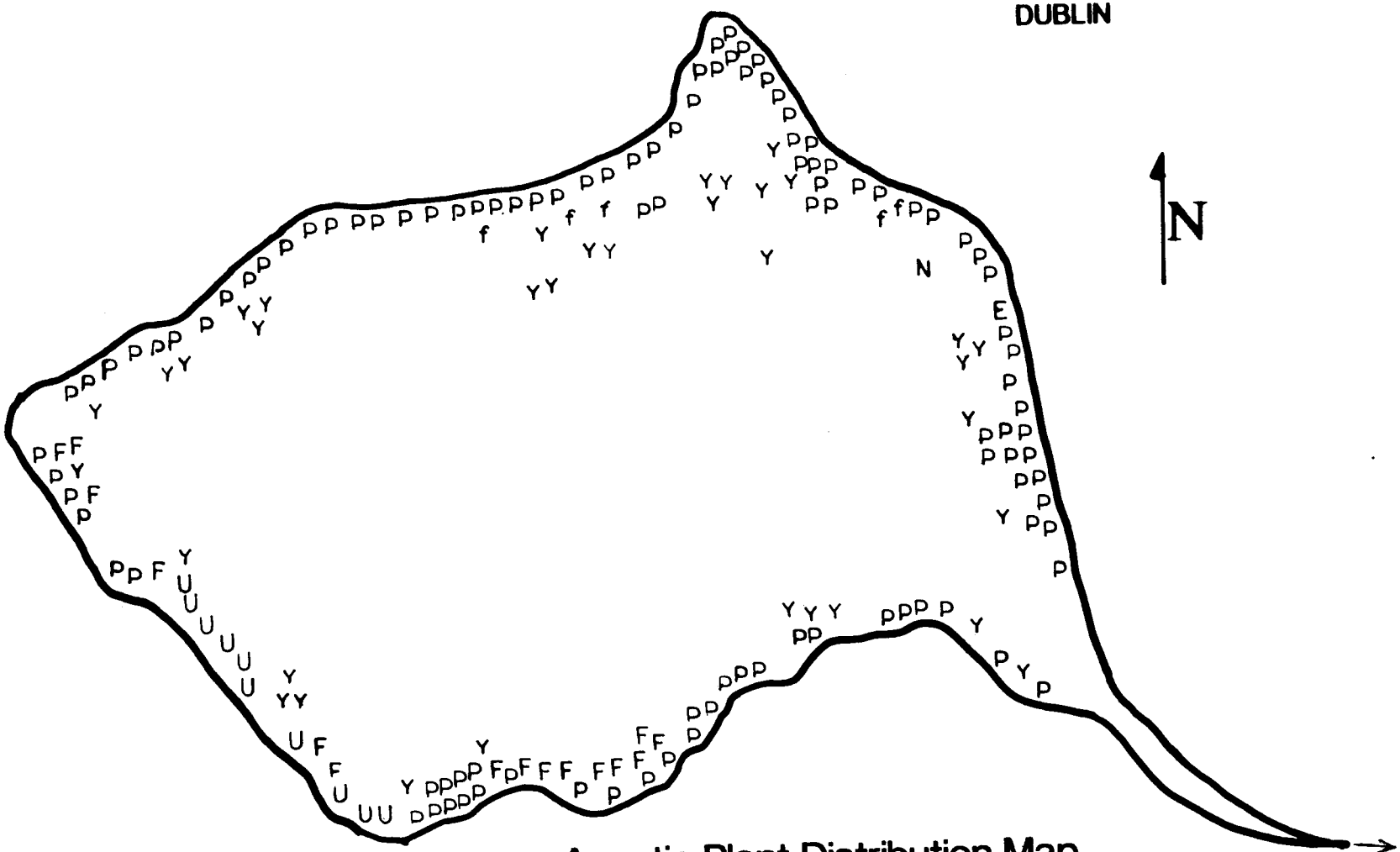
	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	24.5	8.5	100 %
	0.5	24.5	8.4	99 %
	1.0	24.5	8.4	99 %
	1.5	24.0	8.6	101 %
	2.0	23.5	8.6	99 %
	2.5	23.0	8.5	98 %
	3.0	23.0	8.4	97 %
	3.5	22.5	8.3	94 %
	4.0	22.0	7.9	89 %
	4.5	22.0	7.1	81 %

SECCHI DISK (m): 5.1
BOTTOM DEPTH (m): 5.1
TIME: 1215

COMMENTS:

*Dissolved oxygen values are in mg/L

WIGHT POND



Aquatic Plant Distribution Map

AQUATIC PLANT SURVEY

LAKE: WIGHT POND TOWN: DUBLIN DATE: 07/05/90

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
P	Pontederia cordata	Pickerelweed	Scat/Common
Y	Nuphar	Yellow water lily	Scattered
F	Nymphoides cordatum	Floating heart	Scattered
f	Chlorophyceae	Filamentous green algae	Sparse
E	Eriocaulon septangulare	Pipewort	Sparse
U	Utricularia	Bladderwort	Scattered

OVERALL ABUNDANCE: Scat/Common

GENERAL OBSERVATIONS:

1. Bladderwort was more abundant than indicated on the map. It was dispersed throughout the pickerelweed beds, and it was common along the northern shoreline where it was covered by filamentous algae.
2. A freshwater sponge colony was observed.